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10/573,770	03/28/2006	Kimmo Laiho	915-002.010	3998

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EXAMINER

GUZMAN, APRIL S

ART UNIT

PAPER NUMBER

2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/573,770

Applicant(s)

LAIHO ET AL.

Examiner

April S. Guzman

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/28/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement submitted on 03/28/2006 has been considered by the Examiner and made of record in the application file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

Art Unit: 2618

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 14-16, 18-19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hwangbo et al. (U.S. Patent Application Publication # 2003/0192061)** in view of **Ericsson et al. (U.S. Patent # 6,239,769)**.

Consider **claim 1**, Hwangbo et al. teach device comprising:

an interface adapted to receive a signal carrying the digital broadcast received via an antenna (Abstract, Figure 2, Figure 3, [0024]-[0026]).

However, Hwangbo et al. fail to teach a loop or coil configured to couple inductively with a corresponding loop or coil included in the mobile terminal so as to transmit the signal to the mobile terminal.

In the related art, Ericsson et al. teach a loop or coil configured to couple inductively with a corresponding loop or coil included in the mobile terminal so as to transmit the signal to the mobile terminal (Abstract, Figure 1, Figure 2, Figure 3, Figure 4, column 2 lines 24-38, and column 3 lines 19-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ericsson et al. into the teachings of Hwangbo et al. for the purpose of coupling signals from an outside antenna to a portable device which transmits signals inductively.

Art Unit: 2618

Consider **claim 14, as applied to claim 1 above**, Hwangbo et al. as modified by Ericsson et al. further teach wherein the loop or coil is a loop and the loop is arranged substantially around a perimeter of a face of the device (Ericsson et al. – Figures 1-4, and column 2 lines 39-63).

Consider **claim 15, as applied to claim 1 above**, Hwangbo et al. as modified by Ericsson et al. teach the loop or coil except for the specific area of the loop or coil of between 10 cm and 50 cm².

Nonetheless, to the extent that Hwangbo et al. as modified by Ericsson et al. does not specify the exact range of the area of the loop or coil, this figure would have been a matter of routine experimentation to one of ordinary skill in the art at the time the invention was made in order to coupling signals from an outside antenna to a portable device which transmits signals inductively via loop or coil. See *In re Aller*, 105 USPQ 233 (CCPA 1955) (Where general conditions of the claim are disclosed in the prior art, it is not inventive to discover optimal or workable ranges by routine experimentation).

Consider **claim 16, as applied to claim 1 above**, Hwangbo et al. as modified by Ericsson et al. teach a device except that the device is adapted to be placed on a piece of furniture.

Nonetheless, the Examiner takes Official Notice of the fact that the set-top box 30 may be placed on a piece of furniture installed in a living room at home.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ericsson et al. into the teachings of Hwangbo et al. for the purpose of coupling signals from an outside antenna to a portable device which transmits signals inductively.

Consider **claim 18**, Hwangbo et al. teach device comprising:

means for receiving a signal carrying the digital broadcast received via an antenna (Abstract, Figure 2, Figure 3, and [0024]-[0026]).

However, Hwangbo et al. fail to teach inductive coupling means configured to couple inductively with a corresponding inductive coupling means included in the mobile terminal so as to transmit the signal to the mobile terminal.

In the related art, Ericsson et al. teach inductive coupling means configured to couple inductively with a corresponding inductive coupling means included in the mobile terminal so as to transmit the signal to the mobile terminal (Abstract, Figure 1, Figure 2, Figure 3, Figure 4, column 2 lines 24-38, and column 3 lines 19-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ericsson et al. into the teachings of Hwangbo et al. for the purpose of coupling signals from an outside antenna to a portable device which transmits signals inductively.

Consider **claim 19**, as applied to **claim 1** above, Hwangbo et al. as modified by Ericsson et al. further teach apparatus comprising device (Hwangbo et al. - Abstract, Figure 2, Figure 3, [0024]-[0026]); and

a mobile terminal including a loop or coil for receiving the signal from the device (Ericsson et al. - Abstract, Figure 1, Figure 2, Figure 3, Figure 4, column 2 lines 24-38, and column 3 lines 19-34).

Consider **claim 22**, Hwangbo et al. teach a method comprising:
receiving a signal carrying a digital broadcast (Abstract, Figure 2, Figure 3, [0024]-[0026]).

However, Hwangbo et al. fail to teach providing said signal to a loop or coil configured to couple inductively with a corresponding loop or coil included in a mobile terminal so as to transmit the signal to the mobile terminal.

In the related art, Ericsson et al. teach providing said signal to a loop or coil configured to couple inductively with a corresponding loop or coil included in a mobile terminal so as to transmit the signal to the mobile terminal (Abstract, Figure 1, Figure 2, Figure 3, Figure 4, column 2 lines 24-38, and column 3 lines 19-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ericsson et al. into the teachings of Hwangbo et al. for the purpose of coupling signals from an outside antenna to a portable device which transmits signals inductively.

Claims 2-13, 20-21, and 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hwangbo et al. (U.S. Patent Application Publication # 2003/0192061)** in view of **Ericsson et al. (U.S. Patent # 6,239,769)**, and further in view of **Friesen et al. (U.S. Patent # 6,892,080)**.

Consider **claim 2, as applied to claim 1 above**, Hwangbo et al. as modified by Ericsson et al. teach a device comprising an interface adapted to receive a signal carrying the digital broadcast received via an antenna and a loop or coil configured to couple inductively with a corresponding loop or coil included in the mobile terminal so as to transmit the signal to the mobile terminal.

However, Hwangbo et al. as modified by Ericsson et al. fail to teach an amplifier adapted to amplify the signal.

Art Unit: 2618

In the related art, Friesen et al. teach an amplifier adapted to amplify the signal (Figure 1, Figure 2, column 4 lines 36-50, and column 5 lines 1-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Friesen et al. into the teachings of Hwangbo et al. as modified by Ericsson et al. for the purpose of dynamically controlling the power output of an amplifier that can be used in combination with virtually any device and providing an amplifier system that interfaces with a mobile terminal or device which address the inherent loss of power between the mobile terminal's antenna and the device's coupling device.

Consider **claim 3, as applied to claim 2 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach wherein said amplifier is adapted to be powered by the mobile terminal (Friesen et al. – Figure 1, Figure 2, and column 4 lines 36-50).

Consider **claim 4, as applied to claim 2 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach wherein said amplifier adapted to be controlled by the mobile terminal (Friesen et al. – Figure 2, column 5 lines 56-67, column 6 lines 1-5, and column 6 lines 11-38).

Consider **claim 5, as applied to claim 4 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach wherein said amplifier is adapted to intermittently operate under control of the mobile terminal (Friesen et al. – Figure 2, column 6 lines 11-38, and column 7 lines 20-37).

Consider **claim 6, as applied to claim 2 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach a detector adapted to determine a position

Art Unit: 2618

of the mobile terminal (Friesen et al. – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38); and

a controller adapted to control operation of said amplifier in dependence upon the position of the mobile terminal (Friesen et al. – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 7, as applied to claim 6 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach wherein the detector comprises a switch to determine whether the mobile terminal is attached to the extension device (Friesen et al. – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 8, as applied to claim 6 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach wherein the detector comprises a sensor adapted to determine whether the mobile terminal is located within a predetermined distance of the extension device (Hwangbo et al. – Figure 2, Figure 3, [0024], [0026]; and Friesen et al. – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 9, as applied to claim 6 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach wherein the controller is adapted to cause the amplifier to reduce gain when the mobile terminal is in a given position (Friesen et al. – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 10, as applied to claim 6 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach wherein the controller is adapted to cause the amplifier to be by-passed when the mobile terminal is in a given position (Friesen et al. – Figure 2, Figure 4, Figure 5, column 6 lines 11-38, and column 7 lines 20-37).

Art Unit: 2618

Consider **claim 11, as applied to claim 6 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach an antenna for receiving an amplified signal from the amplifier and radiatively transmitting the amplified signal to the mobile terminal (Friesen et al. – column 4 lines 63-67, and column 5 lines 1-6); wherein

the controller is adapted to cause the signal to be routed to the loop or coil when the mobile terminal is in a given position (Ericsson et al. – Abstract, column 2 lines 24-38, and column 3 lines 19-34) and to be routed to the amplifier when not (Friesen et al. – column 4 lines 51-67, column 5 lines 1-6, and column 6 lines 11-28).

Consider **claim 12, as applied to claim 1 above**, Hwangbo et al. as modified by Ericsson et al. teach a device comprising an interface adapted to receive a signal carrying the digital broadcast received via an antenna and a loop or coil configured to couple inductively with a corresponding loop or coil included in the mobile terminal so as to transmit the signal to the mobile terminal.

However, Hwangbo et al. as modified by Ericsson et al. fail to teach a filter adapted to obtain said signal from at least one other signal.

In the related art, Friesen et al. teach a filter adapted to obtain said signal from at least one other signal (Figure 2, column 4 lines 51-67, and column 5 lines 1-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Friesen et al. into the teachings of Hwangbo et al. as modified by Ericsson et al. for the purpose of dynamically controlling the power output of an amplifier that can be used in combination with virtually any device and providing an

Art Unit: 2618

amplifier system that interfaces with a mobile terminal or device which address the inherent loss of power between the mobile terminal's antenna and the device's coupling device.

Consider **claim 13, as applied to claim 1 above**, Hwangbo et al. as modified by Ericsson et al. teach a device comprising an interface adapted to receive a signal carrying the digital broadcast received via an antenna and a loop or coil configured to couple inductively with a corresponding loop or coil included in the mobile terminal so as to transmit the signal to the mobile terminal.

However, Hwangbo et al. as modified by Ericsson et al. fail to teach input for receiving power from an external source; and a path adapted to deliver power to the mobile terminal to permit recharging of a rechargeable battery included in the mobile terminal.

In the related art, Friesen et al. teach input for receiving power from an external source; and a path adapted to deliver power to the mobile terminal to permit recharging of a rechargeable battery included in the mobile terminal (Figure 1, and column 1 lines 36-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Friesen et al. into the teachings of Hwangbo et al. as modified by Ericsson et al. for the purpose of dynamically controlling the power output of an amplifier that can be used in combination with virtually any device and providing an amplifier system that interfaces with a mobile terminal or device which address the inherent loss of power between the mobile terminal's antenna and the device's coupling device.

Consider **claim 20, as applied to claim 19 above**, Hwangbo et al. as modified by Ericsson et al. teach a device comprising an interface adapted to receive a signal carrying the digital broadcast received via an antenna and a loop or coil configured to couple inductively with

Art Unit: 2618

a corresponding loop or coil included in the mobile terminal so as to transmit the signal to the mobile terminal.

However, Hwangbo et al. as modified by Ericsson et al. fail to teach wherein the device further comprises an amplifier arranged to amplify the signal.

In the related art, Friesen et al. teach wherein the device further comprises an amplifier arranged to amplify the signal (Figure 1, Figure 2, column 4 lines 36-50, and column 5 lines 1-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Friesen et al. into the teachings of Hwangbo et al. as modified by Ericsson et al. for the purpose of dynamically controlling the power output of an amplifier that can be used in combination with virtually any device and providing an amplifier system that interfaces with a mobile terminal or device which address the inherent loss of power between the mobile terminal's antenna and the device's coupling device.

Consider **claim 21, as applied to claim 20 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach wherein the mobile terminal is configured to cause said amplifier to operate when reception of a time slice is expected (Friesen et al. – column 3 lines 34-37, and column 7 lines 20-37).

Consider **claim 23, as applied to claim 22 above**, Hwangbo et al. as modified by Ericsson et al. teach a method comprising receiving a signal carrying a digital broadcast; and providing said signal to a loop or coil configured to couple inductively with a corresponding loop or coil included in a mobile terminal so as to transmit the signal to the mobile terminal.

However, Hwangbo et al. as modified by Ericsson et al. fail to teach amplifying the signal.

In the related art, Friesen et al. teach amplifying the signal (Figure 1, Figure 2, column 4 lines 36-50, and column 5 lines 1-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Friesen et al. into the teachings of Hwangbo et al. as modified by Ericsson et al. for the purpose of dynamically controlling the power output of an amplifier that can be used in combination with virtually any device and providing an amplifier system that interfaces with a mobile terminal or device which address the inherent loss of power between the mobile terminal's antenna and the device's coupling device.

Consider **claim 24, as applied to claim 22 above**, Hwangbo et al. as modified by Ericsson et al. teach a method comprising receiving a signal carrying a digital broadcast; and providing said signal to a loop or coil configured to couple inductively with a corresponding loop or coil included in a mobile terminal so as to transmit the signal to the mobile terminal.

However, Hwangbo et al. as modified by Ericsson et al. fail to teach intermittently operating an amplifier adapted to amplify the signal under the control of the mobile terminal.

In the related art, Friesen et al. teach intermittently operating an amplifier adapted to amplify the signal under the control of the mobile terminal (Friesen et al. – Figure 2, column 6 lines 11-38, and column 7 lines 20-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Friesen et al. into the teachings of Hwangbo et al. as modified by Ericsson et al. for the purpose of dynamically controlling the power output

Art Unit: 2618

of an amplifier that can be used in combination with virtually any device and providing an amplifier system that interfaces with a mobile terminal or device which address the inherent loss of power between the mobile terminal's antenna and the device's coupling device.

Consider **claim 25, as applied to claim 22 above**, Hwangbo et al. as modified by Ericsson et al. teach a method comprising receiving a signal carrying a digital broadcast; and providing said signal to a loop or coil configured to couple inductively with a corresponding loop or coil included in a mobile terminal so as to transmit the signal to the mobile terminal.

However, Hwangbo et al. as modified by Ericsson et al. fail to teach detecting a position of the mobile terminal; and controlling operation of an amplifier in dependence upon the position of the mobile terminal.

In the related art, Friesen et al. teach detecting a position of the mobile terminal (Friesen et al. – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38); and controlling operation of an amplifier in dependence upon the position of the mobile terminal (Friesen et al. – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Friesen et al. into the teachings of Hwangbo et al. as modified by Ericsson et al. for the purpose of dynamically controlling the power output of an amplifier that can be used in combination with virtually any device and providing an amplifier system that interfaces with a mobile terminal or device which address the inherent loss of power between the mobile terminal's antenna and the device's coupling device.

Art Unit: 2618

Consider **claim 26, as applied to claim 25 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach detecting whether the mobile terminal is attached to the extension device (Friesen et al. – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 27, as applied to claim 25 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach sensing whether the mobile terminal is attached to the extension device (Hwangbo et al. – Figure 2, Figure 3, [0024], [0026]; and Friesen et al. – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 28, as applied to claim 25 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach reducing gain when the mobile terminal is in a given position (Friesen et al. – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 29, as applied to claim 25 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach by-passing the amplifier when the mobile terminal is in a given position (Friesen et al. – Figure 2, Figure 4, Figure 5, column 6 lines 11-38, and column 7 lines 20-37).

Consider **claim 30, as applied to claim 22 above**, Hwangbo et al. as modified by Ericsson et al. teach a method comprising receiving a signal carrying a digital broadcast; and providing said signal to a loop or coil configured to couple inductively with a corresponding loop or coil included in a mobile terminal so as to transmit the signal to the mobile terminal.

However, Hwangbo et al. as modified by Ericsson et al. fail to teach routing the signal to the loop or coil when the mobile terminal is within a given range; routing the signal to an amplifier when the mobile terminal is outside the given range.

In the related art, Friesen et al. teach routing the signal to the loop or coil when the mobile terminal is within a given range (Ericsson et al. – Abstract, column 2 lines 24-38, and column 3 lines 19-34); routing the signal to an amplifier when the mobile terminal is outside the given range (Friesen et al. – column 4 lines 51-67, column 5 lines 1-6, and column 6 lines 11-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Friesen et al. into the teachings of Hwangbo et al. as modified by Ericsson et al. for the purpose of dynamically controlling the power output of an amplifier that can be used in combination with virtually any device and providing an amplifier system that interfaces with a mobile terminal or device which address the inherent loss of power between the mobile terminal's antenna and the device's coupling device.

Consider **claim 31, as applied to claim 30 above**, Hwangbo et al. as modified by Ericsson et al. as further modified by Friesen et al. further teach radiatively transmitting an amplified signal output from the amplifier (Friesen et al. – column 4 lines 63-67, and column 5 lines 1-6).

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hwangbo et al. (U.S. Patent Application Publication # 2003/0192061)** in view of **Ericsson et al. (U.S. Patent # 6,239,769)**, and further in view of **Wallen (GB 2266997 A)**.

Art Unit: 2618

Consider **claim 17, as applied to claim 1 above**, Hwangbo et al. as modified by Ericsson et al. teach a device comprising an interface adapted to receive a signal carrying the digital broadcast received via an antenna and a loop or coil configured to couple inductively with a corresponding loop or coil included in the mobile terminal so as to transmit the signal to the mobile terminal.

However, Hwangbo et al. as modified by Ericsson et al. fail to teach an antenna mounted on a roof or to an externally facing side of an external wall of a building.

In the related art, Wallen teaches an antenna mounted on a roof or to an externally facing side of an external wall of a building (Abstract, Figure 1, page 1 paragraph 2, and page 2 paragraph 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Wallen into the teachings of Hwangbo et al. as modified by Ericsson et al. for the purpose of connecting an antenna to a device in order to improve reception and transmission of signals providing a way of connecting a portable device to an external antenna without the need for specifically matching electrical connection and coupling without direct electrical contact such as inductively with the portable device.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see PTO-892 Notice of Reference Cited).

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Art Unit: 2618

Commissioner for Patents
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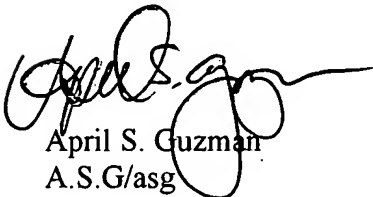
Hand-delivered responses should be brought to

Customer Service Window
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Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April S. Guzman whose telephone number is 571-270-1101. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

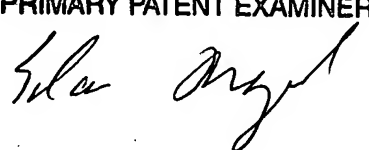
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


April S. Guzman
A.S.G/asg

02/28/07

EDAN ORGAD
PRIMARY PATENT EXAMINER

 2/21/07